

CATS



The Official Journal of the Capital Area Timex/Sinclair Users Group

Presidential Ramblings

Twenty two of us gathered for the March meeting, so the change of date apparently did not adversely affect attendance. The General Meeting itself was brief. I reported that Ted Osheroff has agreed to work on the needed changes in the Constitution (reduce the number needed for a Quorum and change both the effective date of the Officer's term of office and the method of appointing the Nominating Committee.)

Also, since Barry had assured us that our Treasury is healthy, the Executive Board approved my suggestion of purchasing whatever equipment is needed to connect the large TV and/or whatever is needed by the program presenter. Cliff Watson volunteered to accumulate the required cords, cables, switches, and whatever else will be helpful and it all will be stored on site.

Duane announced the dates of the additional meetings at the Linthicum library which are announced elsewhere. We're hoping that these "extras" will increase in popularity. And please note that although his name was omitted from the last NL article, Cliff Watson is Duane's "right hand man" in this venture.

For the formal Program, Mark started out with additional pointers on using our BBS. Must confess that since I'm not a Modem user, I did not pay rapt attention to this. But my attention was garnered when he switched into a presentation of how to set up a data base using ARCHIVE. His usual patient tutorial style was

Next Meeting

**At Hyattsville Library
Be There!**

(See Directions Inside)

conducive to learning much needed basics for this rather sophisticated (at least to me) program.

I received a long letter from March Renick, now a Floridian. He took up my suggestion to use the NL for questions. Hopefully his will become the basis of a regular Question and Answer feature. Why not to send in yours?

Before closing let me urge you to subscribe to UPDATE, the last remaining Sinclair publication. Carol and Frank Davis are continuing the high level of professionalism initiated by Bill Jones.

The yearly subscription is \$18 and is for quarterly issues of a fiscal year starting in October. Send your check to:

UPDATE COMPUTER SYSTEMS
P.O. BOX 1095
PERU, IN 48970

Send now and you'll receive the October, January, and April issues and get on the list for the July mailing as well. I'm confident that you will find plenty to interest you in the fifty pages of programs (some of which c 1 1 } z z & + y q z d on disk), reviews, articles and ads.

'Nuff for now,
RUTH

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Key Dates

13 April: CATS Meeting
11:00 Workshop
1:00 Executive Board Meeting
2:00 General Meeting

15 April: Newsletter Deadline
For the Next Issue

4 May: CATS Meeting
New Carrollton Library

Next Meeting:

Hank Dickson, Duane Parker, and Tim Swenson will present a discussion on three different languages; Lisp, Forth, and C. Come and see how each language differs from the others, and how much they share a like. Duane will have Forth up and running on 4 different computers.

From The Editor:

First of all, thanks go out to Mannie Quintero and Joe Miller for lending me thier spare QL's. Just after I picked up a QL from Mannie, my new keyboard matrix arrived. A day later Joe brought another QL for my use. It's the thought that counts.

Now that I have my QL up and running, I knew that something else had to fail. Right in the middle of printing up articles for the newsletter, my Letter Quality printer went wacko. That's the best way to describe what it was doing. So I will rely on the trusty QL printer for the last few articles, this one included. I'm beginning to get the idea that Murphy lives at my house.

I hoped that no one beside myself noticed the slight goof in the last newsletter. I announced that there was going to be a HamFest on the 6th and 7th of March. Well, right days, wrong month. It really was April. I discovered this after I started making plans to attend the Fest. I know that Ruth will have the wet noodle ready for me at the next meeting.

Even though I got my QL up and running in time to get the newsletter done, I did not get it up in time to finish the next installment of the Little Logo series. The syntax checker is the hardest part of the whole program and will take me a couple of days to write. I will have it for the next issue. (Ahh, not another 40 lashes)

I was sent a copy of a letter that a former member, March Renick, by Ruth. In it March asked a few questions relating to the newsletter. I will respond to them here.

1. March suggested that we run short articles on abbreviations. Things like CR, DIY, LF, etc. Some of our members are not clued into the various meaning of the abbreviations.

My response is: Great idea. We could sure use a volunteer to do the articles (hint, hint).

2. March suggested that someone write up articles on the goings on at the workshops and the monthly speakers.

March, this is one idea that we have had for a while, but promised articles have yet to come my way. Now that you are asking for such articles, I hope someone will take the time to write them up.

March also puts in a good word about George Rey. He says "It's always a pleasure to read articles written by George Rey. He always manages to get to the main points without beating around the bush, and doesn't mind speaking his mind." Good work, George.

In closing I just like to say that I recieved quite a few articles this month. If you do not see your article in this issue, it will be in next month's newsletter. We only have so many pages to fill.

Happy Hacking,

Tim

A Text Application for ABACUS

By Lee Gayman

One normally expects to use a spreadsheet program to manipulate lines and columns of numbers. I work in the anesthesia department of a fairly large hospital and have been using ABACUS for designing work schedules for the past year. Having first planned to do scheduling using QUILL, I soon found out that ABACUS offered advantages which I will describe below.

You will see printed the basic schedule grid that I use. Sixteen people rotate through this grid, passing down through the grid week to week, then returning to the top to begin the rotation again. (For purposes of space, the Saturday

column is omitted - if you want to see the whole grid, you will have to see me!).

To use this system, I first make the grid fit a given week, entering the appropriate dates in row 2, then the names of the staff in the appropriate locations in column C. Dates are changed either as a text input or by using F3-a (amend). The names always remain in the same order, so from week to week, each name moves down one spot and the bottom name becomes the top name. This is easily done by using F3 - C(copy)-cells C5:C33 to C7. This then moves the names down but erases the name in C35 which must be re-entered as a text entry in cell C5.

Once this is completed, I print out the grid on the printer (omitting column A) to be used as a worksheet. Staff requests for off-duty time (Vacation, personal days, etc.) are entered by staff members in a booklet from which I pencil requests onto the printed worksheet. Any shifts which must be covered are then penciled into the spaces below the grid, the worksheet is posted, and persons sign-up for these shifts as they are available.

I then refine the worksheet manually to its final form, pencilling shifts from the bottom of the worksheet into the grid where appropriate, adjusting off days to balance daily coverage, then it is back to the QL where I reload and change the grid to meet the changes I have penciled in the worksheet.

Here is a big advantage to this system - since the basic schedule is already in print (i.e. the grid), all that is necessary to create the final schedule is to modify certain cells within the grid. Column A has a listing of all entries I would need for making these changes. Transferring a data item from column A to a given cell is done simply by moving the cursor to that cell, then type in the cell name of the data wanted. (Ex. To change cell F11 from "OFF" to "7-3:30", all I do is move the cursor to cell F4, type in A1, then ENTER and cell F11 is

immediately changed to "7-3:30".) Since column A remains unchanged from week to week, I have memorized the contents of these cells and no longer need to refer to column A to see what entry I need to use for a given line of text.

Once all the changes from my worksheet have been made, I delete the sign-up spaces at the bottom of the grid, I print out the final copy and post it for staff use.

While this system has proven very helpful to me in this application, I would still like to further refine the system to reduce the amount of manual counting of shifts I need to do for each column. It would be wonderful to have a horizontal window showing me the number of persons scheduled for each shift and each column so I could more easily manipulate the "OFF" days to provide equal staff coverage each day of the week. To my knowledge, however, ABACUS does not have a facility to quantify the frequency of string statements in a given column.

As always, any comments or suggestions would be welcomed!

Chaos

By Mark Fisher

continued from last month

```
580 SCALE 1,0,0
590 CSIZE 3,1:PAPER 4:INK
    6:CLS:BORDER 15
600 PRINT "Mathematical Taffy"
610 CSIZE 0,1: PRINT "A look at
    chaos"
620 CSIZE 0,0: PRINT "Mark
    Fisher, 1990"
630 PRINT "This program
    generates a BIFURCATION
    DIAGRAM. This program takes a
    simple formula, which
    mathematically stretches the
    number between 0 and 1
    and folds them back into
    themselves. The formula is
    iterated, and after
    200 loops, values of X are
    plotted. For many amounts of
    stretch, X will tend to a
    very few specific, values.
```

```
Past a certain point, though,
there is a fractal pattern
of possible endpoints."
640 INPUT "DO YOU WANT TO:
(L)oad a previous screen" TO
16;"(D)raw
new"!k$:key=CODE(k$)&&95:REMa-
rk && is bitwise AND - I'm
forcing upper case
650 SELECT ON key
660 =CODE("L")
670 CLS:INPUT "Load from
what device? (ENTER if using
TK2)!" d$
680 DIR#1,
d$&"_scn":INPUT "load what
screen file? (skip _scn):" k$
690 BORDER 2,6:CLS
700 LBYTES d$&k$&"_scn",
131072
710 CLS#0:INPUT#0, "Start
point? (Lower left hand
number)";s_scan
720 INPUT#0, "End point?
(Lower right hand
number)";e_scan
730 =CODE("D")
740 INPUT "Scan number
line from what point? (0 -
4)";s_scan
750 INPUT "Scan number
line TO what point? (0 -
4)";e_scan
760 BORDER 2,6:CLS
770 AT 18,0:PRINT
s_scan;TO
40;s_scan+((e_scan-s_scan)/2)-
;TO 82-LEN(e_scan);e_scan
780 FOR K=0 TO 1.9 STEP
.19
790 LINE K,0 TO K,3E-2
800 NEXT K
810 =REMAINDER :GO TO 640
820 END SELECT
830 scalar=1.9/(e_scan-s_scan)
840 END DEFINE
850 DEFINE PROCEDURE windo_set
860 REMark set up remaining
windows (reset with wmon)
870 REMark -----
880 WINDOW#0,
452,56,0,200:REMark control
area
890 INK#0, 4:CLS#0:PRINT
#0,'Cursor ↑ to increase reps,
Cursor ↓ to decrease '\Cursor
← or → to change point
considered '\Press Space to
toggle sound OFF'
900 INK#0, 6:AT#0,
0,48:PRINT#0, INT(reps)!'reps
```

	SUN.	MON.	TUES.	WED.	THURS.	FRI.
Nguyen	1. OFF	7-3:30	7-3:30	7-3:30	ON -	CALL
Ormond	2. OFF	OFF	OFF	7-3:30	9:30-6	7-3:30
Patrick	3. CALL	OFF	8:30-5	7-3:30	7-3:30	9:30-6
Abercrombie	4. OFF	7-3:30	7-3:30	7-3:30	7-3:30	7-3:30
Brown	5. OFF	8:30-5	ON -	CALL	OFF	8:30-5
Carlson	6. ON -	CALL	3-11:30	3-11:30	OFF	OFF
Dias	7. OFF	3-11:30	3-11:30	OFF	7-3:30	ON -
Eagle	8. OFF	7-3:30	7-3:30	7-3:30	7-3:30	7-3:30
Frank	9. 7-3:30	7-3:30	8:30-5	ON -	CALL	OFF
Goodbody	10. OFF	8:30-5	7-3:30	7-3:30	3-11:30	3-11:30
Hartman	11. OFF	7-3:30	9:30-6	OFF	8:30-5	7-3:30
Inis	12. 3-11:30	3-11:30	OFF	7-3:30	7-3:30	7-3:30
Johnson	13. OFF	7-3:30	7-3:30	8:30-5	7-3:30	8:30-5
Killroy	14. OFF	ON -	CALL	8:30-5	7-3:30	7-3:30
Leggman	15. 11-2	OFF	7-3:30	9:30-6	7-3:30	OFF
Moore	16. OFF	9:30-6	7-3:30	3-11:30	3-11:30	3-11:30

Please SIGN UP BELOW FOR SHIFTS YET TO BE COVERED:

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```

910  REMark -----
920  WINDOW#2,
    511,200,0,0:REMark program mod
    area
930  REMark -----
940  OPEN#3,
    con_60x56a453x200:BORDER#3,
    1,13:CLS#3:REMark plotted
    position report area
950  REMark -----
960  OPEN#4,
    con_508x2a3x196:PAPER#4,
    6:CLS#4:REMark cursor area
970  END DEFINE
980  DEFINE PROCEDURE savit
990  SAVE flp1_chaos7_bas
1000 END DEFINE

```

Hyattsville Library Directions

By Joe Miller

If taking 495 or 95:

1. Exit southbound on Route 1.
2. Turn right on Highway 410
(Riverdale Rd) (15th light).

If Taking B-W Parkway:

1. Exit Westbound on Highway 410.

Once on Highway 410:

3. Turn right onto Adelphi Rd
(6th light).
4. Turn left onto Toledo Rd.
5. Library is on the left.

Meeting room is the first door on the left, upon entering the library. Be carefull since some of these turn come very quickly. Bring quarters if parking on Toledo Rd.

Estate Planning

By George Rey

Lingo

It's useless to discuss a subject without a clear understanding by all parties of exactly what is meant by critical words to be used in the discussion. Although lawyers and the law have moral obligations to ascertain clarity of the language, it appears this is

not the case, as confusion predominates, presumably to "snow" the "sheep" amongst us. So here are a few definitions to keep you from being penned in.

PROBATE is the institutionalized process to close out one's accounts on dying. It's required by state law, will or no will, of one's "estate". The need for probate is questionable but creditors of a deceased demand their due and blood kin want their share of the spoils. The latter is the moralistic excuse for government involvement, the former is likely the real motive as creditors of old wielded a big political stick -- just ask Jean Paul---- of "Les Miserables" what the price of owing a loaf of bread cost in them days. In short you can't escape probate. In my case I intend to provide a will to meet the requirements of the law leaving no doubt to the Register of Wills so I can be laid to rest in peace.

One's ESTATE is viewed (defined) differently by the various institutions having some jurisdiction, or say, about how an estate is to be distributed or taxed. A PROBATE ESTATE is limited to only that property a decedent has titled in his own name. Thus arranging your estate, like "Tip O'Neil" must of done (the Post says his net worth is \$25,000) allows one to be a legal pauper but otherwise well off. When "Tip" leaves us his probate cost should be low indeed, as probate costs are directly proportional to the size of the probate estate. So what has he done to be so poor - on the record? I'd say he set up a trust and passed legal title of the lions share of his worth, and in so doing leaves the probaters with little to feast on. However, in an inheritance tax state like Maryland they have a NON-PROBATE ESTATE reporting requirement which will tax those assets depending on the relationship of the beneficiary to the deceased. As a result I am considering moving to a more civilized state. But in any event those non-probate assets do not go through the formal probate process.

Then there is the FEDERAL TAXABLE ESTATE, which includes everything, but the kitchen sink, that is everything you have an interest in, except Social Security and your Marital Deduction.

Finally there is your TOTAL LIVING ESTATE which includes all you own, control, or have an interest in, including Social Security which has a present value while you live, based on your life expectancy, and your monthly annuity. On death, if there is a survivor interest in your SS, that too can be given a present value but based on the life expectancy of the recipient.

Now what's a TRUST? It is a hang-over from the "dark ages" of likely longer legal precedence than corporate law. It's a personal contract between a donor (trustor, settlor) and a trustee (asset manager) for the benefit of beneficiaries. Sounds like an insurance policy, which it is to a great extent. And it is, or should be, just as personal and private without third parties being privy to the terms or management of the trust. States (Maryland), for sure, do not include insurance assets passing to named beneficiaries as part of one's probate, or non-probate estates, but if the beneficiary is your estate the insurance proceeds will be probated. Trusts arose long ago to protect the counts, lords and major land holders from having their property confiscated by the King (Government) by making a deal with the church, whereby title to the property was placed in the church's name and the count (donor) retained the use of the property. A good reference on lingo is Alex J. Soled's - "Wills, Estates, Trusts, & Death Taxes" an AARP book.

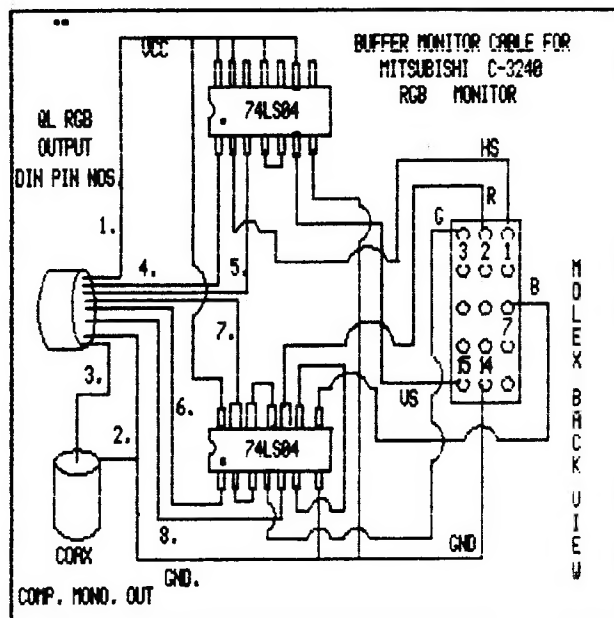
RGB Monitor Cable

By Barry Washington

There has been renewed interest in the "Skip Fisher" adapter/buffer cable for the QL RGB monitor output. As many know, the QL is vulnerable to damaging external voltages thru it's RGB circuits which are not internally buffered.

In addition to this, the QL marches to a different drummer when it comes to the Horizontal Sync pulses it provides for the RGB monitor. These pulses are present in the "Composite Sync" output, but have an opposite polarity to the requirement of most monitors. We have, therefore, the necessity to invert the Horizontal Sync Pulses to make them compatible with RGB monitors.

I have changed the original circuit slightly to make use of two chips that are cheap and readily available. Included herewith are a circuit diagram, a list of basic parts and some sources for them. I'll have a sample cable available for the scheduled hardware session on this subject. After checking out the assembled cable, I consolidate and protect it with a length of 7/8" dia. shrink tubing which extends from over the back end of the Molex connector to beyond the chips and wiring area.



PARTS LIST

1ea. CONNECTOR, 8 PIN DIN (MALE)
RADIO SHACK #274-026 @ \$1.79

1ea. PIECE OF 9 CONDUCTOR CABLE R-S
#278-775 @ \$0.59/FT., (I USE 5
FEET)

2ea. HEX INVERTER CHIPS #74LS04 @
\$1.09/2 AVAILABLE AT ARCADE
ELECTRONICS, ANNANDALE, VA. AND
MOST ELECTRONIC SUPPLY HOUSES

1ea. 15 PIN MOLEX CONNECTOR --SOLD
IN SETS-- (WALDOM PKG. NO.
1625-15PRT @ \$5.42) (contains two
bodies and all the necessary pins)
(ALSO AVAILABLE AT ARCADE)

CAUTION MOLEX PINS ARE
EASILY INSERTED, BUT A PAIN TO
REMOVE --- BE SURE OF THE PROPER
LOCATION WHEN INSERTING PINS !!!!

Here's to a sharp eye, steady hand
and a small tipped GROUND
soldering iron.

Next Workshop

Cables for QL <--> Skip Fisher's
RGB Monitor

Let's get together and get it
together! Barry Washington, Cliff
Watson, myself and others expect to
be there with soldering irons and
conflicting advice on the best of
many ways to connect the QL and
monitor. If you wish to take
advantage of this splendid 3 ring
circus you should bring the
following:

1. Yourself - very important! (you have to be there.)
2. Your QL and Mitsubishi C-3240 (aka Skip Fisher special).
3. Cable - shielded with at least 7 conductors preferred. **
4. Male 8 pin DIN fitting, preferably attached to cable.
5. Integrated Circuit Chips - see below -
6. Optional MOLEX connector - see below -
7. 3 conductor power cord with plug for 110 Volts AC
8. Power socket (3 hole plastic) & pins provided by Skip Fisher.

9. Patience and anything you remember that we forgot.

IC's needed -

The monitor wants negative Red, Blue, and Green signals plus positive Horizontal and Vertical sync signals. The QL provides negative R, B, G, and Horiz.(!) plus positive Vert. So we need to change the negative Horiz. to positive Horiz. The IC for this job is an inverter, and they come in a 6 pack, known as hex inverters. 74 (or 54) '04, '05, '06, '16 are some that you'll find. Any of them should do. (ie 7404, 7405, 7406, 7416) To provide isolation and extra oomph (drive it) buffers are recommended. Double inversion amounts to a non-inverting buffer. We can use the inverters in tandem, or we can use chips designed for the purpose, known as non-inverting buffers that also come in 6 packs. Examples are the '07 and '17. (ie. 7407, 74LS07, 7417, 74LS17) So bring either 2 inverter chips or 1 inverter chip and 1 buffer chip.

The IC's will need power from either the QL or the monitor. The USA version of QL provides +5 volts instead of the PAL color TV, right at the RGB connector, so that's a very convenient place to get it.

The chips can be taped to the outside of the cable near the monitor.

MOLEX? This is about a \$5 item. The neat and easy way is to get it. Then you can plug and unplug the cable to other monitors. Parts needed are: MOLEX-Waldom 15-circuit polarized nylon min series .062" 1 ea. Receptacle, part # 03-06-1151 (or -2152) 8 ea. terminals, female, part # 02-06-1103 (or -1132)

Hank Dickson and I are planning to bypass this connector and permanently hard-wire the cable to the monitor. It involves soldering directly to the underside of the monitor circuit board. We also plan to take power for the chips from the monitor, and use a bit of perf-board to mount the chips in the monitor.

** The 7 wires are for: Red,
Blue, Green, Horiz., Vert.,
Signal Ground, +5volts The
shield is connected to either the
QL or the monitor but NOT to both.
The QL is generally the choice.

See you there. H.L. Schaaf

Current Sinclair Dealers

Compiled by Bob Curnutt

The John Oliger Co.
11601 Whidbey Drive
Cumberland IN 46229
(hardware accessories for 2068)

A.E.R.Co
P. O. Box 18093
Austin TX 78760
(hardware for 1000, 2068)

EMSOFT
P. O. Box 8763
Boston MA 02114
(software for QL)

A.F.R. Software
1605 Pennsylvania Ave., #204
Miami FL 33139
(for 1000/2068)

Mountaineer Software
749 Hill St., #9
Parkersburg WV 26104
(for 1000/2068)

Byte Power
1748 Meadowview Ave.
Pickering Ontario 3G8
(software for 1000/2068)

R. M. G.
1419 1/2 7th St.
Oregon City OR 97045
(has almost ANYTHING for
Sinclair machines)

Sharp's
Box 326
Mechanicsville VA 23111
703-730-9697
(NEW QL's, parts, s/w; also
stuff for PC's, mfg.closeouts)

Ed Grey Enterprises
P. O. Box 2188
Inglewood CA 90305
(2068 & 1000, some Q.L. stuff)

Cuyahoga Valley Software Works
615 School Ave.
Cuyahoga OH 44221
(2068 s/w)

Eric Johnson
249 N. Harden Ave.
Orange City FL 32763
(2068/1500/1000, extra parts
and miscellaneous goodies)

Larken Electronics
R. R. #2,
Navan Ontario K4B 1H9
(Canada)
(Creator of the LARKEN I/F for
the 2068)

BACK ISSUES

Cats Computer Club has back
issues

of our newsletter available from
1989 to the present. Price will
be \$0.45 per issue.
Please make a check out to CATS
but mail it to the following:

Audrey Curnutt
10400 Truxton Rd.
Adelphi MD 20783
301-439-8756

Did 'Ja Know?

By Ruth Fegley

This Column is the direct
result of some comments that my
earlier tidbits in Ramblings have
indeed been useful - not merely
the "look at me" tactics of the
newly initiated QL user.

Admittedly, it is doubtful if
the tried and true Guru will learn
from it, but I'm learning that
there are more enrolled in
Continuing Ed than in the
Graduate School Programs! So here
goes with DID ' JA KNOW...

1. that you're smart if you
always QUIT the PSION programs
instead of merely "pulling the

plug?" If you're in QUILL, you're reminded to SAVE the File (unless you merely read it without making changes) - sure is important if you've just spent a lot of time drafting something you need. to finish later. If you're in ARCHIVE, the file is closed for you - another important step. (I haven't learned the other two programs, but these two have convinced me to make QUIT a routine, not just the occasional choice.)

2. it's wise to check the position of the cursor before you print and are using continuous form paper? If the cursor is positioned at the top of the next page - rather than just below the last line of text - the printer will continue to move paper until the position of the cursor is reached. (This is particularly important if a Header or Footer is used.)

3. that using bold type in ABACUS the numbers shift left? So if they are the total of a column, they are not positioned correctly in relation to the figures in the column. (I'm referring to changing print commands within the ABACUS file, not within the Print Driver.) Perhaps this should be a Question to the new Question & Answers column. Someone may know how to obtain Bold Print of numbers while retaining correct position. So far I've succeeded only with text, and am sharing this with you as I see it.

"Nuff for now,

RUTH FEGLEY

Concept-3D Bug-alert

By Mark Fisher

I've toyed with Concept-3D over the years, but had been put off by its unfortunate habit of committing hara-kiri when I tried to SAVE a file.

I found out why! - the disk was too capacious! Thanks to the BASIC version of the program that was included with the compiled version, I found that it used the DIR

command to evaluate the space available on the storage medium. Its evaluation only looked at the first four digits of the space available line, searching for the "/" that ended the number. On Quad density disks, the "/" appears as the FIFTH character: 1234/1440. When the "/" wasn't found in 4 bytes, it flipped out and crashed, along with the work I'd just done.

The Fix: I added a "filler" file large enough to bring the disk's capacity down to three digits. By using SBYTES Flpl_filler,0,20000 this was achieved. If I ever fill up the disk to the point that I need that 200K, I'll be able to delete it.

Other fiddles... Design-3D can be slow to use for entering large symmetrical forms. It is possible to create coordinate files in a word processor. C-3D uses paired files, a coordinate file with a _CD extension, and a relations file with a _MD extension. The _CD file is a series of single numbers terminated with <CR>. The first number is the number of points. The remaining numbers are the coordinates, in sets of four numbers: a flag (0 if the start of a line, 1 if a mid or end point), and x,y, & z coordinates.

The EDITOR is particularly useful in manipulating columns of numbers into table form so that I could see what was happening, and in restoring them to single column form for C-3D. The _MD file is more recondite. I've made do by creating a dummy file of the correct number of points and cells, saving it, then renaming it to go with my _CD file.

I don't know enough about using QRAM with compiled programs, and I would welcome information about how to get them to multitask under QRAM (or even Taskmaster).

HamFests & Computer Shows

Compiled by Bob Curnutt

Below are the dates for three Ham radio and Computer shows.

Greater Baltimore Hamboree and ComputerFest

April 6th and 7th (not March as in the last issue)

8 am - 5 pm (4 pm Sunday)

Maryland State Fairgrounds

Timonium, MD

Cost \$5 for both days.

Carroll County Hamfest and Computer Show

Sunday, April 21

Open 8 am

Carroll County Agricult. Center

Westminster, MD

Cost \$5

Memorial Day Hamfest

Sunday, 26 May

8 am - 3 pm

Howard County Fairgrounds

West Friendship, MD

Cost \$4

LKDOS*FD-68*LKDOS*FD-68*LKDOS*

****> RMG ENTERPRISES <=>**

and

LARKEN ELECTRONICS

=>=> ANNOUNCE <=>

THE AERCO-LKDOS CARTRIDGE

IT'S READY!! IT'S HERE!! IT'S GREAT!!

Now you can add a REAL DISK OPERATING SYSTEM to your 2868 and AERCO FD-68 CONTROLLER!

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New High Tech Center Now Open

By Hank Dickson

A bright, promising center for high tech adventure has exploded onto the Washington horizon.

It is something which deserves the attention of CATS members, their friends, and their families.

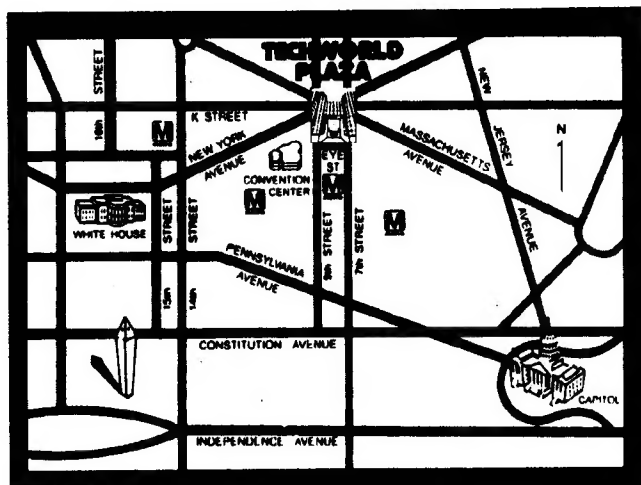
Dubbed "TECH 2000", it is located at 800 K St. NW, adjacent to the D.C. convention center, in the new "TechWorld" building.

TECH 2000 resembles a laid-back, carpeted, bi-level video arcade, but it has much, much more substance. It is actually the world's first personal-experience gallery dedicated solely to interactive multi-media.

There are 75 game-like exhibits demonstrating how the marriage of computers and video technology is changing the way we learn, work, acquire information, and commune.

While this may sound intimidating, it turns out to be lots of fun. Moving from station to station, a visitor takes self-paced tours, investigating those facets of the world of information/communication that are most appealing.

Hours at TECH 2000 are 11 to 5, Tuesday to Sunday. Admission is \$4 for adults, \$3 for children.



CATS maintains a gratis exchange of newsletters with approximately 30 Users Groups across the U.S. and Canada. Groups not sending a newsletter to us for six months are automatically taken off the list.

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Executive Board
The Capital Area Timex/Sinclair Users Group is a not-for-profit group devoted to serving the interests of those who own, use, or are interested in the Timex/Sinclair family of computers.

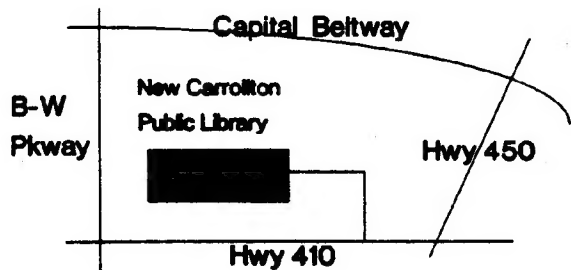
Timex SIG on CompuServe: Wednesday night, 10:00 PM Eastern time (GO CLUB). CATS BBS: (301) 588-0579. 8-N-1. 300/1200 baud. News and general information, 24 hours a day.

Networks
Memberships cost \$15 per year, are good for 12 months, and include all privileges (access to libraries, group buys, etc.). A newsletter only subscription is available for persons living outside the Washington Metro area and is \$12 per year.

Meetings
Monthly meetings are held from 11:00 AM to 4:30 PM, on the second Saturday of each month, at the New Carrollton Public Library.

CATS Newsletter
P.O. Box 11017
Takoma Park, MD 20913

FIRST CLASS MAIL



The next meeting of CATS will be held on: April 13, 1991

At: Hyattsville Library, just off Toledo Rd in Hyattsville, Maryland

IF YOU ARE NOT A MEMBER OF CATS. THIS IS THE ONLY ISSUE YOU WILL RECEIVE